



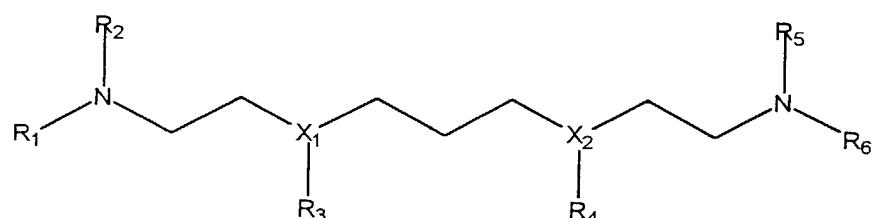
Serial No. 10/017,235 - Murphy - Abstract

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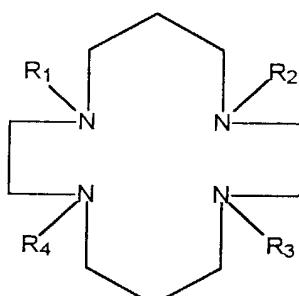
**ABSTRACT (Once Amended)**

The invention relates to the preparation of novel polyamines, such as derivatives of 1,3-bis-[*(2'-aminoethyl)-amino]propane (2,3,2-tetramine) and 1,4,8,11-tetraazacyclotetradecane (cyclam), which can be used to treat mitochondrial and degenerative diseases.*

Accordingly, in one aspect the invention is directed to compounds of the formula:



or



wherein

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> may be the same or different and are hydrogen, alkyl, aryl, cycloalkyl, amino acid, glutathione, urate, ascorbate, estrogen, dehydroepiandrosterone, redox stabilizing substituents, a quinone, glutamate, succinate, -(CH<sub>2</sub>)<sub>n</sub>[XCH<sub>2</sub>)<sub>n</sub>]NH<sub>2</sub> - wherein n = 3-6 and X = nitrogen, sulfur, phosphorous or carbon, or heterocycle wherein R<sub>1</sub> to R<sub>6</sub> taken together are -(CH<sub>2</sub>XCH<sub>2</sub>)<sub>n</sub>- wherein n = 3-6 and X = nitrogen, sulfur, phosphorous or carbon.

M, n, and p may be the same or different and are bridging groups of variable length from 3-12 carbons.

X<sub>1</sub> and X<sub>2</sub> may be the same or different and are nitrogen, sulfur, phosphorous or carbon.